

REMARKS

Claims 1-4 and 12-22 remain for reconsideration. Claims 5-11 and 21-28 have been previously cancelled.

Claim 1 has been objected to for reciting “surface surface”. Accordingly, the second occurrence of this word has been deleted. Applicants thank the examiner for noting this typo.

The prior art rejections stand as follows:

1. Claims 1-4, 12 and 15-22 are rejected under 35 U.S.C. § 102(b), as being anticipated by EP 0413903A1 to Yoon et al..
2. Claims 1 and 12 are rejected under 35 U.S.C. § 102(b), as being anticipated by U.S. Patent 5,334,551 to Komatsu.
3. Claims 13 and 14 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over Komatsu in view of U.S. Patent 6,221,565 to Jain.

These rejections are respectfully traversed based on the following discussion.

Briefly, as discussed in paragraph [0024], “*FIG. 1F shows a waveguide 30 comprising an organic material that is allowed to form in the cavity 20 (FIG. 1D) between the two electrodes 16. In one embodiment, an organic crystal is grown in the presence of a DC electric field created by*

applying a voltage to the two electrodes 16 via the contacts 22. The electric field causes the dipole moments of the organic material's molecules to substantially align with the electric field in a common direction. Once the organic material crystallizes its molecules are locked into alignment wherein the crystallographic orientation is dictated by the direction of the applied electric field. Although polymers may be aligned similarly, an organic crystal has an advantage that it does not exhibit "creep" like polymers do. Thus, the alignment and organization of molecules in the organic crystals do not destabilize over time" (emphasis added).

Independent claims 1 and 12 have been amended to recite that the waveguide is formed "in a cavity between the two electrodes in the presence of the electric field" (emphasis added).

It was previously argued that both Yoon and Komatsu teach a waveguide that is disposed between the electrodes in a stacked configuration. As a result, there is no plane that is substantially parallel to the top surface plane of the substrate that also contains the waveguide and the electrodes as claimed.

In response, the examiner argued that "there is not a specific plane claimed" and, giving the expression its plain meaning, applicant's claims still read on Yoon and Komatsu's stacked configuration. To clarify or further define the orientation of the plane, a cavity is now recited between the two electrodes where the waveguide is formed. No such cavity is taught or suggested by either Yoon or Komatsu or Jain. This cavity is believed to distinguish over the

stacked configuration shown in the prior art. As such, it is respectfully requested that the outstanding rejections be withdrawn.

In view of the foregoing, it requested that the application be reconsidered, that claims 1-4 and 12-22 be allowed and that the application be passed to issue. Please charge any shortages and credit any overcharges to Intel's Deposit Account number 50-0221.

Respectfully submitted,

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